

RESPONSE TO OFFICE ACTION

In the Claims:

Please amend claims 1, 4-6, 8, 9, 23-25, 32-40, 42, 44, 47, 49-51, 59, and 61-64 as set forth below. Please cancel claims 17-19, 31, 41 and 43, currently on file, without prejudice or disclaimer. Please withdraw claims 52-56 and 58, currently on file, without prejudice or disclaimer. Upon entry of the amendments, the status of the claims will be as follows:

Complete Listing of the Claims

1. (currently amended) An antisense oligonucleotide from about ~~15~~ 20 to 100 nucleotides in length comprising ~~at least 15 consecutive nucleotides with~~ a sequence complementary to a human neuropilin mRNA, wherein said mRNA has a sequence as set forth in SEQ ID NO:33 and ~~wherein said~~ antisense oligonucleotide comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12, and wherein said antisense oligonucleotide specifically binds to a nucleic acid comprising a sequence corresponding to said mRNA and inhibits neuropilin expression in a human and inhibits tumor cell growth in a human.
2. (canceled).
3. (canceled).
4. (currently amended) A vector comprising a sequence encoding an antisense oligonucleotide from about ~~15~~ 20 to 100 nucleotides in length, said antisense oligonucleotide comprising a sequence complementary to a human neuropilin mRNA, wherein said mRNA has a sequence as set forth in SEQ ID NO:33 and ~~wherein said~~ antisense oligonucleotide comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12, and wherein said antisense oligonucleotide

specifically binds to a nucleic acid comprising a sequence corresponding to said mRNA and inhibits neuropilin expression in a human and inhibits tumor cell growth in a human.

5. (currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable excipient and an effective amount of an antisense oligonucleotide from about ~~15~~20 to 100 nucleotides in length comprising ~~at least 15 consecutive nucleotides with a~~ sequence complementary to a human neuropilin mRNA, wherein said mRNA has a sequence as set forth in SEQ ID NO:33 and ~~wherein said~~ antisense oligonucleotide comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12, and wherein said antisense oligonucleotide specifically binds to a nucleic acid comprising a sequence corresponding to said mRNA and inhibits neuropilin expression in a human and inhibits tumor cell growth in a human.
6. (currently amended) A method for inhibiting the growth of a human tumor comprising, administering to a human having the tumor an effective amount of an antisense oligonucleotide from about 20 to 50 nucleotides in length comprising at least 15 consecutive nucleotides with a sequence complementary to a human neuropilin mRNA under conditions such that the antisense oligonucleotide inhibits the growth of the tumor, wherein said mRNA has a sequence as set forth in SEQ ID NO:33, said tumor is derived from a carcinoma, and said antisense oligonucleotide specifically binds to a nucleic acid comprising a sequence corresponding to said mRNA.
7. (previously presented) The method according to Claim 6 further comprising the step of administering to the human a chemotherapeutic agent.
8. (currently amended) The method according to Claim 6 wherein the antisense oligonucleotide is from 20 to 50 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.

9. (currently amended) The method according to Claim 6 wherein the antisense oligonucleotide is nuclease resistant.
10. (canceled).
11. (canceled).
12. (canceled).
13. (canceled).
14. (canceled).
15. (canceled).
16. (canceled).
17. (canceled) ~~The antisense oligonucleotide according to claim 1, wherein the oligonucleotide is from 20 to 100 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.~~
18. (canceled) ~~The vector according to claim 4, wherein the oligonucleotide sequence is from 20 to 100 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.~~
19. (canceled) ~~The pharmaceutical composition according to claim 5, wherein the oligonucleotide is from 20 to 100 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.~~
20. (canceled).
21. (canceled).
22. (canceled).
23. (currently amended) A method of inhibiting the growth of human cancer cells comprising, contacting said cancer cells *in vitro* with an effective amount of an antisense

oligonucleotide from about 20 to 50 nucleotides in length comprising at least 15 consecutive nucleotides with a sequence complementary to a human neuropilin mRNA, wherein said mRNA has a sequence as set forth in SEQ ID NO:33, under conditions such that the antisense oligonucleotide inhibits the growth of the cancer cells.

24. (currently amended) The method according to claim 23, wherein the antisense oligonucleotide is from 20 to 50 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
25. (currently amended) The method according to Claim 23 wherein the antisense oligonucleotide is nuclease resistant.
26. (canceled).
27. (canceled).
28. (canceled).
29. (canceled).
30. (previously presented) The method according to Claim 6, comprising administering said antisense oligonucleotide by infusion.
31. (canceled) ~~The oligonucleotide according to Claim 1, wherein said oligonucleotide is from about 20 to 100 nucleotides in length.~~
32. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
33. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide is a peptide nucleic acid.

34. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide comprises a morpholino backbone structure.
35. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide comprises at least one modified base selected from the group consisting of xanthine, hypoxanthine, 2-aminoadenine, 6-methyl, 2-propyl and other alkyl adenines, 5-halo uracil, 5-halo cytosine, 6-aza uracil, 6-aza cytosine and 6-aza thymine, pseudo uracil, 4-thiouracil, 8-halo adenine, 8-aminoadenine, 8-thiol adenine, 8-thiolalkyl adenines, 8-hydroxyl adenine, 8-halo guanines, 8-amino guanine, 8-thiol guanine, 8-thioalkyl guanines, 8-hydroxyl guanine, 5-trifluoromethyl uracil and 5-trifluoro cytosine.
36. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide comprises one or more modified internucleotide linkages in the phosphate backbone selected from the group consisting of methyl phosphonate, phosphorothioate, phosphorodithioate and phosphotriester internucleotide linkages.
37. (currently amended) The antisense oligonucleotide according to Claim 1, wherein the antisense oligonucleotide comprises one or more phosphorothioate internucleotide linkages.
38. (currently amended) The antisense oligonucleotide according to Claim 1, wherein the antisense oligonucleotide comprises one or more alkyl, cycloalkyl or heterocyclic intersugar linkages.
39. (currently amended) The antisense oligonucleotide according to Claim 1, wherein the antisense oligonucleotide comprises at least one nucleotide that is a 2'-O-substituted ribonucleotide.

40. (currently amended) The antisense oligonucleotide according to Claim 1, wherein said antisense oligonucleotide is nuclease resistant.
41. (canceled) ~~The vector according to Claim 4, wherein said oligonucleotide is from about 20 to 100 nucleotides in length.~~
42. (currently amended) The vector according to Claim 4, wherein said antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
43. (canceled) ~~The pharmaceutical composition according to Claim 5, wherein said oligonucleotide is from about 20 to 100 nucleotides in length.~~
44. (currently amended) The pharmaceutical composition according to Claim 5 wherein said antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
45. (previously presented) The method according to Claim 6, wherein said tumor is a cancer selected from the group consisting of melanoma, colon cancer, lung cancer, prostate cancer, pancreatic cancer and breast cancer.
46. (canceled).
47. (currently amended) A method of inhibiting colon cancer growth comprising, administering to a human having a colon cancer an effective amount of an antisense oligonucleotide from about 20 to 50 nucleotides in length comprising at least 15 consecutive nucleotides with a sequence complementary to a human neuropilin mRNA,

wherein said mRNA has a sequence as set forth in SEQ ID NO:33, and wherein said antisense oligonucleotide inhibits the growth of the colon cancer in the human.

48. (previously presented) The method according to Claim 47 further comprising the step of administering to the human a chemotherapeutic agent.
49. (currently amended) The method according to Claim 47, wherein the antisense oligonucleotide is nuclease resistant.
50. (currently amended) The method according to Claim 47, wherein the antisense oligonucleotide is from 20 to 50 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
51. (currently amended) The method according to Claim 47, wherein the antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
52. (withdrawn) A method of inhibiting metastasis of a melanoma comprising, administering to a human having a melanoma an effective amount of an antisense oligonucleotide from about 20 nucleotides to 50 nucleotides in length comprising at least 15 consecutive nucleotides with a sequence complementary to a human neuropilin mRNA, wherein said mRNA has a sequence as set forth in SEQ ID NO:33, and wherein said oligonucleotide inhibits the metastasis of the melanoma in the human.
53. (withdrawn) The method according to Claim 52, further comprising the step of administering to the human a chemotherapeutic agent.
54. (withdrawn) The method according to Claim 52, wherein the oligonucleotide is nuclease resistant.

55. (withdrawn) The method according to Claim 52, wherein the oligonucleotide is from 20 to 50 nucleotides in length and comprises a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
56. (withdrawn) The method according to Claim 52, wherein the oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
57. (previously presented) The method according to Claim 47, comprising administering said antisense oligonucleotide by infusion.
58. (withdrawn) The method according to Claim 52, comprising administering said antisense oligonucleotide by infusion.
59. (currently amended) The method according to Claim 6, wherein the antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
60. (canceled).
61. (currently amended) The method according to Claim 23, wherein the antisense oligonucleotide consists of a sequence selected from the group consisting of SEQ ID NOs:1, 2, 3, 5, 6, 8, 9, 10, 11 and 12.
62. (currently amended) The antisense oligonucleotide according to claim 1, wherein the antisense oligonucleotide is from about 20 to 50 nucleotides in length.

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Wright et al.
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63. (currently amended) The vector according to claim 4, wherein the antisense oligonucleotide is from about 20 to 50 nucleotides in length.
64. (currently amended) The pharmaceutical composition according to claim 5, wherein the antisense oligonucleotide is from about 20 to 50 nucleotides in length.